



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,919	09/27/2001	Ram Baboo Gupta	01005-00	3204

7590 09/24/2002

James A. Jubinsky, Esq.
Cytec Industries Inc.
1937 West Main Street
Stamford, CT 06904-0060

EXAMINER

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT PAPER NUMBER

1624

DATE MAILED: 09/24/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/964,919	GUPTA ET AL.	
	Examiner	Art Unit	
	Venkataraman Balasubramanian	1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 June 2002.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) 12-19 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6 is/are rejected.
 7) Claim(s) 7-11 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Applicants' response, which included amendment to claim 1, filed on 6/28/2001, is made of record.

Claims 1-19 are pending. Of which claims 12-19 were withdrawn from consideration as noted in paper # 4.

Claims 1-11 are active in the case.

In view of applicants' response, all 112 rejections made in the previous office action have been obviated. Furthermore, in view of applicants' pointing out in the teaching of Huber et al., Ar has to be same and the proviso in claim 1 excludes another naphtyl with hydroxyl in ortho position, 103 rejection over Huber et al. made in the previous office action is withdrawn.

However, the following apply:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by GB1,107,143.

GB 1,107,143 discloses several trisubstituted triazines with at least one β -naphthol group as claimed in the instant claims for use as dyes for dyeing variety of materials. See formula shown on page 1 and note the definition of various R and X

Art Unit: 1624

groups. See page 2-6 for various compounds made which include those claimed in the instant claims. See examples 2-9.

This rejection is same as made in the previous office action but limited to claim 1. Applicants' argument to overcome this rejection is not persuasive.

Applicants object to the examiner's statement "GB 1,107,143 discloses several trisubstituted triazines with at least one β -naphthol group, and assert that the reference discloses that the triazine compound must contain two 2-hydroxynaphthyl groups. This is not entirely correct. The formula on col. 1, line 25 permits X to be naphthalene with hydroxyl group (but not in para position to the triazine ring) and thus would represent a mono naphthyl compound. Furthermore, examples teach both tri and di napthyl compounds with hydroxyl in ortho position. Hence, examiner's statement that GB teaches trisubstituted triazines with **at least one β -naphthol group** is correct.

Contrary to applicants' urging that the reference does not teach instant compounds in view of the proviso at the end of claim 1, the GB reference teaches the instant compound and the proviso fails to exclude reference compound. Note the proviso recites, "that the radical of formula II is not a naphthyl substituted with a hydroxyl ortho to the point of attachment to the triazine ring". This applies to Z definition and hence would exclude the reference compound(s). However, Z is not limited to formula II. According to claim I, when T is a bond, Z can also be a substituted aryl of 6-24 carbon atom, which would therefore include naphthyl. Thus compounds taught by the reference can be viewed as trisubstituted triazine having one naphthol group, one

group of formula II, and one Z group other than formula II, as required by the instant claim. Thus instant compounds are taught by the reference.

Hence the rejection is proper and is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardy et al. US 3,118,887.

Hardy et al. teach a several tris aryl-triazinyl compounds for the use as UV stabilizers for polymeric material. See formula I and preferred formula II on col. 1-2. Note the definition of X, Y, Z includes napthyl and the substituents in the aryl ring include a hydroxyl ortho to the point of attachment to triazine. Note Hardy et al. teach the process of making these compounds on col.2 line 64-72 and col. 3 lines 1-13. Particularly, note Hardy et al. teaches, for unsymmetrical trisaryl substituted triazines, isolation of intermediates particularly, bisaryl chloro triazine. See col. 5-10 for the experimental conditions. Note the explicit teaching of one or more equivalents of the aromatic compound with cyanuric chloride and then use of the intermediate for further reaction. See Examples 2, 4, 8 and 12 for experimental details.

Instant claims require a trisubstituted triazine with one naphthyl group with a hydroxyl ortho to the point of attachment, an aryl group which of formula II and another

group TZ. Hardy differs from the instant claims in showing examples of tris 2-hydroxy-naphthyl-triazine and several mono, di and tri phenolic-triazines.

However, Hardy et al. teaches equivalency of those compounds exemplified in the examples with those claimed in the definition of X, Y, Z groups and the various variable groups on them. See col. 1-2.

Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring and the aryl ring as permitted by the reference and expect resulting compounds to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. US 2001/0020094 A1.

Gupta et al. teaches a process for making trisaryl triazines for useful as UV absorbers. See formula I-IV on pages 8-10 and note the definition of, Y, Ar₁, Ar₂ and other variable R groups. Note Ar₁, and Ar₂ can be different and R groups on these groups can form an unsaturated carbocyclic ring and that the formula IV can be a naphthyl ring bearing a hydroxyl ortho to the point of attachment of the triazine. See page 11 where the process of making is taught. Note explicit definition of aryl ring (Ar₁, Ar₂), particularly naphthalene (see 0058). See examples 1-73 on page 16-30.

Instant claim require a naphthyl group with a hydroxyl in ortho to the point of attachment but examples of the Gupta include only phenolic compounds derived from formula IV.

However, Gupta et al. teaches equivalency of those compounds bearing phenolic group of examples 1-73 exemplified with those claimed in the definition of formula IV. See pages 8-10.

Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring and the aryl ring including a naphthyl as permitted by the reference and expect resulting compounds to possess the uses taught by the art in view of the equivalency teaching outline above.

Allowable Subject Matter

Claims 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Said claims would be allowed since specific dimeric, trimeric and tetrameric trisubstituted triazines embraced in these claims are not taught or suggested by the art of record or from a search in the relevant art area.

As for rejoinder issue, the claims 1-11 are not yet in condition for allowance.

Conclusion

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (703) 305-1674. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is Mukund Shah whose telephone number is (703) 308-4716.

Application/Control Number: 09/964,919
Art Unit: 1624

Page 7

The fax phone number for the organization where this application or proceeding is assigned (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

V. Balasubramanian
Venkataraman Balasubramanian

9/24/2002